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(FILE 'HOME' ENTERED AT 12:05:47 ON 11 OCT 2006)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, JAPIO' ENTERED AT 12:06:09 ON 11  
OCT 2006

L1 235 S (ANTI NITROTYROSINE ANTIBOD?)  
L2 1 S L1 AND DNPH?  
L3 69 S L1 AND (OXIDAT?)  
L4 39 S L3 AND STRESS?  
L5 20 DUPLICATE REMOVE L4 (19 DUPLICATES REMOVED)  
L6 6681 S DINITROPHENYLHYDRAZINE?  
L7 2 S L6 AND L5  
L8 2 DUPLICATE REMOVE L7 (0 DUPLICATES REMOVED)

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L8 2 DUPLICATE REMOVE L7 (0 DUPLICATES REMOVED)

=>

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AN 95261594 EMBASE

DN 1995261594

TI Reactive species in ischemic rat lung injury: Contribution of peroxynitrite.

AU Ischiropoulos H.; Al-Mehdi A.B.; Fisher A.B.

CS Institute for Environmental Medicine, John Morgan Bldg., Univ. of Pennsylvania, 3620 Hamilton Walk, Philadelphia, PA 19104-6068, United States

SO American Journal of Physiology - Lung Cellular and Molecular Physiology, (1995) Vol. 269, No. 2 13-2, pp. L158-L164. .  
ISSN: 1040-0605 CODEN: APLPE7

CY United States

DT Journal; Article

FS 002 Physiology

037 Drug Literature Index

LA English

SL English

ED Entered STN: 26 Sep 1995

Last Updated on STN: 26 Sep 1995

AB Lung ischemia-reperfusion represents a potentially important mechanism for diverse forms of tissue injury associated with decreased pulmonary flow. Previous studies demonstrated oxidative injury in ischemic-reperfused lungs. The present study was designed to evaluate the contribution of nitric oxide and peroxynitrite in tissue injury. The levels of the stable decomposition products of nitric oxide and peroxynitrite, nitrite plus nitrate, were twofold greater than control during reperfusion after 60 min of ischemia. Inhibition of nitric oxide synthesis by endotracheal insufflation of 5 mM N(G)-nitro-L-arginine methyl ester, 30 min before the induction of ischemia, decreased the production of lung thiobarbituric acid reactive substances (TBARS) by 67% ( $P < 0.05$ ,  $n = 5$ ), TBARS released into the lung perfusate by 55% ( $P < 0.05$ ,  $n = 5$ ), lung-conjugated dienes by 61% ( $P < 0.05$ ,  $n = 5$ ), and dinitrophenylhydrazine-reactive protein carbonyl levels by 86% ( $P < 0.05$ ,  $n = 5$ ). Amino acid analysis of tissue homogenates from lungs exposed to 60 min of ischemia and 60 min of reperfusion revealed a 1.8-fold ( $P < 0.05$ ,  $n = 5$ ) increase in nitrotyrosine concentration compared with 2 h continuously perfused lungs. Inhibition of nitric oxide synthesis abolished the increase in nitrotyrosine levels. Furthermore, lungs exposed to 60 min of reperfusion after 60 min of ischemia showed specific binding of an anti-nitrotyrosine antibody. In reperfused tissues, antibody binding was observed throughout the lung. The binding was blocked with excess of nitrotyrosine, and minimal binding was observed in nonperfused blood-free control lungs. These results indicate that a strong oxidant derived from nitric oxide consistent with the reactivity of peroxynitrite contributes to the oxidative injury of isolated rat lung from ischemia-reperfusion.

CT Medical Descriptors:

\*lung injury: ET, etiology

\*lung perfusion

animal cell

animal experiment

animal tissue

article

controlled study

lung blood flow

male

nonhuman

oxidation

oxidative stress

oxygen transport

pathophysiology

priority journal

rat

reperfusion

Drug Descriptors:

\*n(g) nitroarginine methyl ester: PD, pharmacology

\*nitric oxide: EC, endogenous compound

\*oxidizing agent: EC, endogenous compound

\*thiobarbituric acid reactive substance: EC, endogenous compound

peroxynitrite: EC, endogenous compound

RN (n(g) nitroarginine methyl ester) 50903-99-6; (nitric oxide) 10102-43-9

=>

AN 1975:27408 CAPLUS  
DN 82:27408  
ED Entered STN: 12 May 1984  
TI Chemical modification of nucleic acids. II. Reaction  
of calf thymus DNA with hydrazine and 2,4-dinitrophenylhydrazine  
AU Tsai, Kuang-Hsin; Kantesaria, P.; Marfey, P.  
CS Dep. Biol. Sci., State Univ. New York, Albany, NY, USA  
SO Physiological Chemistry and Physics (1974), 6(4), 353-66  
CODEN: PLCHB4; ISSN: 0031-9325  
DT Journal  
LA English  
CC 6-2 (General Biochemistry)  
AB 2,4-Dinitrophenylhydrazine (DNPH) reacted with deoxyadenosine,  
deoxyguanosine, and deoxycytidine under mild conditions, but not with  
thymidine. Only deoxycytidine reacted with hydrazine at pH 6. Treatment  
of DNA with DNPH at pH 4 led to the incorporation of 1  
DNPH group/111-165 deoxynucleotide residues. Treatment of DNA 1st  
with hydrazine at pH 6 followed by treatment with excess  
1-fluoro-2,4-dinitrobenzene at pH 8.2 afforded derivs. in which, depending  
on exptl. conditions, 1 DNPH group was introduced/29-528  
deoxynucleotide residues. The derivs. obtained exhibited high mol. weight  
and retained the native structure. The covalently attached DNPH  
chromophore in DNA may be a useful absorption probe in a study of its  
interaction with other mols. or ions.  
ST DNA reaction hydrazine dinitrophenylhydrazine  
IT Deoxyribonucleic acids  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with hydrazine and dinitrophenylhydrazine)  
IT 119-26-6  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with DNA)  
IT 70-34-8  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with DNA hydrazine derivative)  
IT 961-07-9  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with dinitrophenylhydrazine)  
IT 951-77-9  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with dinitrophenylhydrazine and hydrazine)  
IT 302-01-2, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(with DNA)  
IT 58-61-7, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(with dinitrophenylhydrazine)

ANSWER 6 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1975:27408 CAPLUS  
DN 82:27408  
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TI Chemical modification of nucleic acids. II. Reaction  
of calf thymus DNA with hydrazine and 2,4-dinitrophenylhydrazine  
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DT Journal  
LA English  
CC 6-2 (General Biochemistry)  
AB 2,4-Dinitrophenylhydrazine (DNPH) reacted with deoxyadenosine,  
deoxyguanosine, and deoxycytidine under mild conditions, but not with  
thymidine. Only deoxycytidine reacted with hydrazine at pH 6. Treatment  
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on exptl. conditions, 1 DNPH group was introduced/29-528  
deoxynucleotide residues. The derivs. obtained exhibited high mol. weight  
and retained the native structure. The covalently attached DNPH  
chromophore in DNA may be a useful absorption probe in a study of its  
interaction with other mols. or ions.  
ST DNA reaction hydrazine dinitrophenylhydrazine  
IT Deoxyribonucleic acids  
RL: RCT (Reactant); RACT (Reactant or reagent)  
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IT 119-26-6  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with DNA)  
IT 70-34-8  
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IT 961-07-9  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with dinitrophenylhydrazine)  
IT 951-77-9  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with dinitrophenylhydrazine and hydrazine)  
IT 302-01-2, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(with DNA)  
IT 58-61-7, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(with dinitrophenylhydrazine)

ANSWER 1 OF 226 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on  
 STN

AN 2001:462605 BIOSIS

DN PREV200100462605

TI Processes for detecting polynucleotides, determining genetic mutations or defects in genetic material, separating or isolating nucleic acid of interest from samples, and useful compositions of matter and multihybrid complex compositions.

AU Engelhardt, Dean L. [Inventor, Reprint author]; Rabbani, Elazar [Inventor]

CS New York, NY, USA  
 ASSIGNEE: Enzo Diagnostics, Inc., New York, NY, USA; c/o Enzo Biochem, Inc., New York, NY, USA

PI US 6221581 20010424

SO Official Gazette of the United States Patent and Trademark Office Patents, (Apr. 24, 2001) Vol. 1245, No. 4. e-file.  
 CODEN: OGUPE7. ISSN: 0098-1133.

DT Patent

LA English

ED Entered STN: 3 Oct 2001  
 Last Updated on STN: 22 Feb 2002

AB Double hybrid or multihybrid probes and compositions are usefully combined with capture assay and immobilization to provide for detection processes in which target polynucleotides can be detected or the presence or absence of genetic mutations or defects in genetic material can be determined. The capture assay involves capturing a hybrid structure, e.g., single hybrid, double hybrid or multihybrid, or capturing a complex formed by reacting a hybrid structure with a complex forming moiety, e.g., protein, such as a binding protein including an antibody. Immobilization can also be employed prior to hybridization or complexation in which instance a polynucleotide probe can be fixed to a matrix or solid support, e.g., natural or synthetic. Capture and immobilization can be carried out using direct and indirect binding and attachment techniques. Targets can be detected directly or indirectly by using a signal generating moiety and labels.

NCL 435006000

CC General biology - Miscellaneous 00532

IT Major Concepts  
 Molecular Genetics (Biochemistry and Molecular Biophysics); Methods and Techniques

IT Methods & Equipment  
 genetic material defect detection: detection method; genetic mutation determination: determination method; nucleic acid isolation: isolation method; nucleic acid separation: separation method; polynucleotide detection: detection method

IT Miscellaneous Descriptors  
 double hybrid probes; multihybrid probes

L7 ANSWER 2 OF 226 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation

ANSWER 3 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:633957 CAPLUS

DN 134:82839

ED Entered STN: 13 Sep 2000

TI Immobilization of protein monolayers on planar solid supports

AU Dubrovsky, Timothy B.

CS Roche Diagnostic Systems, Inc., Somerville, NJ, USA

SO Protein Architecture (2000), 25-54. Editor(s): Lvov, Yuri; Moehwald, Helmuth. Publisher: Marcel Dekker, Inc., New York, N. Y. CODEN: 69AHGU

DT Conference; General Review

LA English

CC 9-0 (Biochemical Methods)

AB A review with 111 refs. is presented regarding the critical steps of preparation, activation, and characterization of self-assembled monolayers of silane mols. The strategies for synthesis of two self-assembling systems that can be used for covalent immobilization of protein monolayers on solid supports are described. The first class of self-assembling system is alkylsilane compds. with different terminal functionalities. The general procedures for silanization of silicon and glass surfaces as well as the anal. methods for characterization of self-assembled monolayers are described. Characterization by spectroscopies, ellipsometry, and contact angles verified that synthetic routes employed lead to well-defined surfaces with controlled mol. architecture that can be routinely used in various biomaterials investigations. It has been demonstrated that monolayers of mitochondrial cytochrome P450scc and oriented antibody layers can be transferred from the air-water interface to the silanized quartz supports without damage to the structure. The second class of self-assembling system discussed is  $\omega$ -substituted alkanethiols chemisorbed onto the surface of gold. Alkanethiol monolayers are stable, permit the introduction of a variety of functional groups onto surfaces, and can be well organized. These monolayers can host either active groups or affinity ligands for the specific binding of protein mols. This approach to synthesis of model surfaces may find use in diagnostic assays and affinity chromatog.

ST review protein immobilization planar support

IT Proteins, general, reactions

RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)  
(immobilization of protein monolayers on planar solid supports)

IT Immobilization, biochemical

(protein; immobilization of protein monolayers on planar solid supports)

RE.CNT 111 THERE ARE 111 CITED REFERENCES AVAILABLE FOR THIS RECORD  
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AN 1999358516 EMBASE

TI Microscale determinations using solid phase assays: Applications to biochemical, clinical and biotechnological sectors. A review.

AU Vynios D.H.

CS D.H. Vynios, Laboratory of Biochemistry, Section of Organic Chemistry, Department of Chemistry, 261 10 Patras, Greece

SO Journal of Liquid Chromatography and Related Technologies, (1999) Vol. 22, No. 17, pp. 2555-2574.

Refs: 36

ISSN: 1082-6076 CODEN: JLCTFC

CY United States

DT Journal; General Review

FS 027 Biophysics, Bioengineering and Medical Instrumentation

029 Clinical Biochemistry

LA English

SL English

ED Entered STN: 29 Oct 1999

Last Updated on STN: 29 Oct 1999

AB The assays that have one of the reactant species immobilized onto a solid support are described as solid phase assays. During the last 20 years a large number of such assays has been developed, the majority of which are quantitative analytical methods known under the general term ELISA (Enzyme Linked ImmunoSorbent Assay). Solid phase assays, in general, have widely been used in Biochemistry, Clinical Chemistry, and Biotechnology, mainly for analytical purposes, and for the detection of specific macromolecules or the study of interactions between various molecules, as well.

CT Medical Descriptors:

\*assay

enzyme linked immunosorbent assay

clinical chemistry

biotechnology

polymerase chain reaction

zymography

human

review

Drug Descriptors:

\*messenger RNA: EC, endogenous compound

\*DNA: EC, endogenous compound

\*streptavidin

\*metalloproteinase: EC, endogenous compound

\*hyaluronic acid

\*hyaluronidase: EC, endogenous compound

\*autoantibody: EC, endogenous compound

\*oligosaccharide

\*lysozyme

\*aggrecan

polystyrene

monoclonal antibody

antigen

biotin

avidin

protein

proteoglycan

glycosaminoglycan

1 (3 dimethylaminopropyl) 3 ethylcarbodiimide

glucose: EC, endogenous compound

oxidoreductase

peroxidase

peroxide

bilirubin: EC, endogenous compound

*adon's*

nitrite: EC, endogenous compound  
ketone body: EC, endogenous compound  
urobilinogen: EC, endogenous compound  
chorionic gonadotropin: EC, endogenous compound  
collagen

RN (DNA) 9007-49-2; (streptavidin) 9013-20-1; (metalloproteinase) 81669-70-7;  
(hyaluronic acid) 31799-91-4, 9004-61-9, 9067-32-7; (hyaluronidase)  
9001-54-1, 9055-18-9; (lysozyme) 9001-63-2; (polystyrene) 9003-53-6;  
(biotin) 58-85-5; (protein) 67254-75-5; (1 (3 dimethylaminopropyl) 3  
ethylcarbodiimide) 1892-57-5, 25952-53-8, 7084-11-9; (glucose) 50-99-7,  
84778-64-3; (oxidoreductase) 9035-73-8, 9035-82-9, 9037-80-3, 9055-15-6;  
(peroxidase) 9003-99-0; (peroxide) 14915-07-2; (bilirubin) 18422-02-1,  
635-65-4; (nitrite) 14797-65-0; (urobilinogen) 11000-27-4; (chorionic  
gonadotropin) 9002-61-3; (collagen) 9007-34-5

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AN 1999358516 EMBASE

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CT Medical Descriptors:

- \*assay
- enzyme linked immunosorbent assay
- clinical chemistry
- biotechnology
- polymerase chain reaction
- zymography
- human
- review

Drug Descriptors:

- \*messenger RNA: EC, endogenous compound
- \*DNA: EC, endogenous compound
- \*streptavidin
- \*metalloproteinase: EC, endogenous compound
- \*hyaluronic acid
- \*hyaluronidase: EC, endogenous compound
- \*autoantibody: EC, endogenous compound
- \*oligosaccharide
- \*lysozyme
- \*aggrecan
- polystyrene
- monoclonal antibody
- antigen
- biotin
- avidin
- protein
- proteoglycan
- glycosaminoglycan
- 1 (3 dimethylaminopropyl) 3 ethylcarbodiimide
- glucose: EC, endogenous compound
- oxidoreductase
- peroxidase
- peroxide
- bilirubin: EC, endogenous compound

nitrite: EC, endogenous compound  
ketone body: EC, endogenous compound  
urobilinogen: EC, endogenous compound  
chorionic gonadotropin: EC, endogenous compound  
collagen

RN (DNA) 9007-49-2; (streptavidin) 9013-20-1; (metalloproteinase) 81669-70-7;  
(hyaluronic acid) 31799-91-4, 9004-61-9, 9067-32-7; (hyaluronidase)  
9001-54-1, 9055-18-9; (lysozyme) 9001-63-2; (polystyrene) 9003-53-6;  
(biotin) 58-85-5; (protein) 67254-75-5; (1 (3 dimethylaminopropyl) 3  
ethylcarbodiimide) 1892-57-5, 25952-53-8, 7084-11-9; (glucose) 50-99-7,  
84778-64-3; (oxidoreductase) 9035-73-8, 9035-82-9, 9037-80-3, 9055-15-6;  
(peroxidase) 9003-99-0; (peroxide) 14915-07-2; (bilirubin) 18422-02-1,  
635-65-4; (nitrite) 14797-65-0; (urobilinogen) 11000-27-4; (chorionic  
gonadotropin) 9002-61-3; (collagen) 9007-34-5

PALM Intranet

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IDS Flag Clearance for Application 10626380



Content	Mailroom Date	Entry Number	IDS Review	Last Modified	Reviewer
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